1. (currently amended) A system for evaluating one or more color scales comprising:

an input interface that receives one or more <u>of a collection of candidate</u> color scales, and one or more test patterns;

one or more color output devices; and

an evaluation process that applies the <u>candidate</u> color scales to the test pattern to determine which of the <u>candidate</u> color scales can be used to create color-coded images on the color output device without violating the condition of perceptual ordering by more than a tolerance.

2. (original) A system, as claimed in claim 1, where the evaluation process warns the user when a color scale can not be used to create color-coded images on the color output device without violating the condition of perceptual ordering by more than a tolerance.

3. (original) A system, as claimed in claim 1, further comprising a rating process used to evaluate the color scales as determined by a perceptual ordering of the test pattern by the user where the respective color scale is used to render the test pattern to the user.

4. (original) A system, as claimed in claim 1, with the color output device includes any one or more of the

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following: a user computer interface, a graphical user interface, an electronic color display, a color printer, a television monitor, and a medical equipment interface.

5. (original) A system, as claimed in claim 1, where one or more color reproduction characteristics of the color output device are unknown.

6. (original) A system, as claimed in claim 1, where an ambient illumination environment of the color output device is unknown.

7. (original) A system, as claimed in claim 1, where a quality of the user's color vision is unknown.

8. (currently amended) A method for evaluating one or more color scales comprising the steps of:

receiving one or more of a collection of candidate color scales, and one or more test patterns; and

applying the candidate color scales to the test pattern to determine which of the candidate color scales can be used to create color-coded images on the color output device without violating the condition of perceptual ordering by more than a tolerance.

9. (currently amended) A computer program product having a stored computer program comprising the steps of:

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receiving one or more <u>of a collection of candidate</u> color scales, and one or more test patterns; and

applying the <u>candidate</u> color scales to the test pattern to determine which of the <u>candidate</u> color scales can be used to create color-coded images on the color output device without violating the condition of perceptual ordering by more than a tolerance.

10. (currently amended) A system for evaluating one or more color scales comprising:

means for receiving one or more <u>of a collection of candidate</u> color scales, and one or more test patterns; and

means for applying the <u>candidate</u> color scales to the test pattern to determine which of the <u>candidate</u> color scales can be used to create color-coded images on <u>a</u> ~~the~~ color output device without violating the condition of perceptual ordering by more than a tolerance.

11. (new) The system, as claimed in claim 1, wherein the collection of candidate color scales are representative of a variety of different viewing setups.

12. (new) The system, as claimed in claim 1, wherein the one or more test patterns is representative of a human face.

13. (new) The system, as claimed in claim 1, further comprising:

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a display for displaying to a user of the system the test image with a series of the candidate color scales applied to the test image to form successive rating images; and

means for receiving from the user a rating for each of the successive rating images.

14. (new) The system, as claimed in claim 13, wherein said rating is representative of how well the user perceives each of the successive test images as not violating the condition of perceptual ordering.

15. (new) The system, as claimed in claim 13, further comprising means for sorting the ratings into a plurality of classes.

16. (new) The system, as claimed in claim 15, further comprising means for determining how many of said rating images are assigned to each of said classes.

17. (new) The system, as claimed in claim 15, wherein said classes include: completely normal, reasonably normal, undecided, somewhat abnormal, and extremely abnormal.

18. (new) The system, as claimed in claim 17, further comprising means for alerting a user of the system if none of said rating images are assigned to the classes of completely normal or reasonably normal.

19. (new) The system, as claimed in claim 1, in combination with a collection of candidate color scales for use by said system.

20. (new) The method, as claimed in claim 8, wherein the collection of candidate color scales are representative of a variety of different viewing setups.

21. (new) The method, as claimed in claim 8, wherein the one or more test patterns is representative of a human face.

22. (new) The method, as claimed in claim 8, further comprising:

displaying to a user of the system the test image with a series of the candidate color scales applied to the test image to form successive rating images; and

receiving from the user a rating for each of the successive rating images.

23. (new) The method, as claimed in claim 22, wherein said rating is representative of how well the user perceives each of the successive rating images as not violating the condition of perceptual ordering.

24. (new) The method, as claimed in claim 22, further comprising sorting the ratings into a plurality of classes.

25. (new) The method, as claimed in claim 24, further comprising determining how many of said rating images are assigned to each of said classes.

26. (new) The method, as claimed in claim 24, wherein said classes include: completely normal, reasonably normal, undecided, somewhat abnormal, and extremely abnormal.

27. (new) The method, as claimed in claim 26, further comprising alerting a user of the system if none of said rating images are assigned to the classes of completely normal or reasonably normal.

28. (new) The computer program product, as claimed in claim 9, in combination with a collection of candidate color scales representative of a variety of different viewing setups.

29. (new) The computer program product, as claimed in claim 9, in combination with one or more test patterns representative of a human face.

30. (new) The computer program product, as claimed in claim 9, wherein the stored computer program further comprises steps of:

displaying to a user of the system the test image with a series of the candidate color scales applied to the test image to form successive rating images; and

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receiving from the user a rating for each of the successive rating images.

31. (new) The computer program product, as claimed in claim 30, wherein said rating is representative of how well the user perceives each of the successive rating images as not violating the condition of perceptual ordering.

32. (new) The computer program product, as claimed in claim 30, wherein the stored computer program further comprises the step of receiving information for sorting the ratings into a plurality of classes.

33. (new) The computer program product, as claimed in claim 31, wherein the stored computer program further comprises the step of determining how many of said rating images are assigned to each of said classes.

34. (new) The computer program product, as claimed in claim 33, wherein said classes include: completely normal, reasonably normal, undecided, somewhat abnormal, and extremely abnormal.

35. (new) The computer program product, as claimed in claim 34, wherein the stored computer program further comprises the step of alerting a user of the system if none of said rating images are assigned to the classes of completely normal or reasonably normal.

36. (new) The computer program product of claim 9, in combination with a collection of candidate color scales.